Asset #57164.000 **6380 - KY - Green River, Mathematics, Grade 7, SEQ #: 1 EQ: N**

Asset Type: Constructed Response / Calculator: Non-Calculator
MA-07-1.1.03: Number Sense - Students will convert among whole numbers, fractions, decimals, percents, and pi, and will compare these numbers.
DOK-3

1. Chris spent $9 of the $12 his grandmother gave him.
   a. Julie said that Chris spent exactly $\frac{2}{3}$ of his money. Explain why Julie is correct or incorrect.
   b. Jessie said that Chris spent exactly 0.75 of his money. Explain why Jessie is correct or incorrect.
   c. Mary said that Chris spent exactly 80% of his money. Explain why Mary is correct or incorrect.

Asset #57164.000 **6380 - KY - Green River, Mathematics, Grade 7, SEQ #: 1 EQ: N**

Scoring Guide

Score	Description
4	The student response demonstrates an exemplary understanding of the Number Properties and Operations concepts involved in converting among whole numbers, fractions, decimals and percents to compare numbers.
3	The student response demonstrates a good understanding of the Number Properties and Operations concepts involved in converting among whole numbers, fractions, decimals and percents to compare numbers. Although there is significant evidence that the student was able to recognize and apply the concepts involved, some aspect of the response is flawed. As a result the response merits 3 points.
2	The student response demonstrates a fair understanding of the Number Properties and Operations concepts involved in converting among whole numbers, fractions, decimals and percents to compare numbers. While some aspects of the task are completed correctly, others are not. The mixed evidence provided by the student merits 2 points.
1	The student response demonstrates a minimal understanding of the Number Properties and Operations concepts involved in converting among whole numbers, fractions, decimals and percents to compare numbers.
0	Response is incorrect or contains some correct work that is irrelevant to the skill or concept being measured.
Blank	No response.

Training Notes

Additional Notes

Note that students can take different approaches to this item. For example, they may find that Chris spent $\frac{3}{4}$ of his money and compare $\frac{3}{4}$ to the numbers, or they may multiply each of the numbers by $12.

Sample Response:

Part a: $\frac{2}{3} \times 12 = 8$, so Julie is incorrect.

Part b: $0.75 \times 12 = 8$, so Jessie is correct.

Part c: $12 \times 80\ \% \ = 12 \times .08 = 9.6$, so Mary is incorrect.

16. a. Julie is incorrect because he spent $9 out of the $12 which is $\frac{3}{4}$ of the money his grandmother gave him.

b. Jessie is correct because if you divide 3 by 4, your answer is 0.75.

c. Mary is incorrect because 0.75 would be 75%.

Contract: 6351 Math	**Grade:** 07	**Content:** Math
Booklet: 1403333811	**Response Code:** MA01116	

4?

Are these explanations complete enough or should they compare: Yes

Ex "because .75 would be 75%, not 80%" or "$\frac{3}{4}$ of the money not $\frac{2}{3}$"

T

16. (A) JULIE SAID THAT CHRIS SPENT EXACTLY $\frac{7}{8}$ OF HIS MONEY. JULIE IS INCORRECT BECAUSE $\frac{7}{8}$ OF HIS MONEY IS $8.

(B) JESSIE SAID THAT CHRIS SPENT EXACTLY 0.75 OF HIS MONEY. JESSIE IS CORRECT BECAUSE $\frac{9}{12}$ IS 0.75 OF HIS MONEY.

(C) MARY SAID THAT CHRIS SPENT EXACTLY 80% OF HIS MONEY. MARY IS INCORRECT BECAUSE $\frac{9}{12}$ IS NOT EQUAL TO 80%.

Contract: 6351 Math	**Grade:** 07	**Content:** Math
Booklet: 1403333594	**Response Code:** MA01116	

3

a + b

C - vague

agree

16. A) Julie is incorrect because $\frac{2}{3}$ is 66.6% an Chris spent 75%

B) Jessie is correct because Chris spent 75%

C) Mary is incorrect because Chris spent 5% less.

Contract: 6351 Math	**Grade:** 07	**Content:** Math
Booklet: 1403333686	**Response Code:** MA01116	

(3)

a - OK

b. doesn't compare it or convert it (given)

c. OK

16. A = incorrect. if he had spent $\frac{2}{3}$ of his money he would have spent $8.

B - .75 is equal to $\frac{3}{4}$ which is 9 of the 12 so possible is correct

C - $\frac{80}{100} = \frac{9}{12}$ $\frac{3}{4} : \frac{240}{400} = \frac{3}{4}$ so mark is also correct.

$\frac{80}{240}$ 80|240

Contract: 6351 Math	**Grade:** 07	**Content:** Math
Booklet: 1403338120	**Response Code:** MA01116	

3

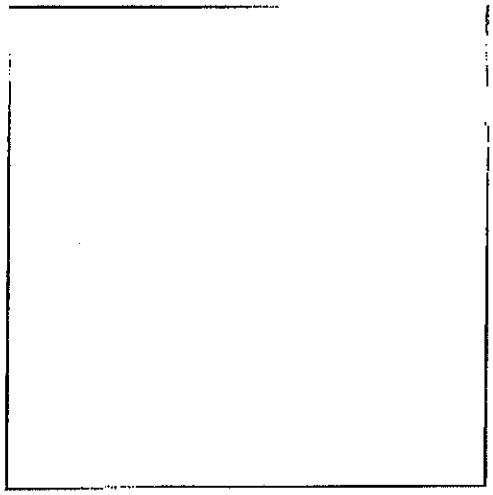
a. OK
b. OK
c. contradictary

A

15. B

$\frac{9}{12} = \frac{3}{4}$

$\frac{3}{4} = \frac{75}{100} = .75$



Contract: 6351 Math	**Grade:** 07	**Content:** Math
Booklet: 1403335237	**Response Code:** MA01116	

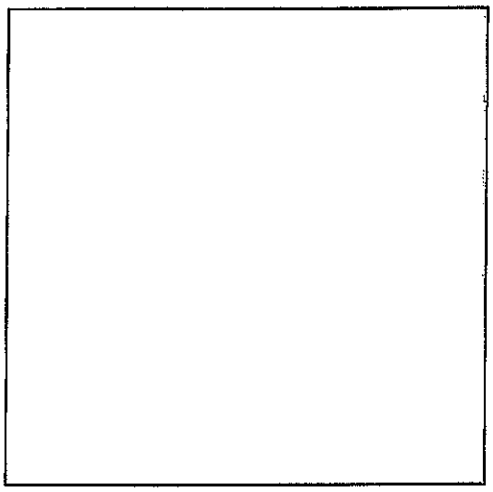
2

a –
b ok
c –

16. (A) Julie is incorrect because he only spent 0.3 out of 0.12 which is reduced to $\frac{1}{4}$

(B) Jessie is incorrect because he only spent .75 of his money.

(C) Mary is incorrect because he only spen a quater of his money.



Contract: 6351 Math	**Grade:** 07	**Content:** Math
Booklet: 1403333501	**Response Code:** MA01116	

1

Minimal 1

16.

They are all incorrect because it dose not say if he had money to start with or if that is all the money he has

Contract: 6351 Math	**Grade:** 07	**Content:** Math
Booklet: 1403334920	**Response Code:** MA01116	

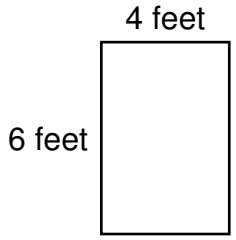
0

A

Asset #57186.000 **6380 - KY - Green River, Mathematics, Grade 7, SEQ #: 2 EQ: N**

Asset Type: Constructed Response / Calculator: Calculator Neutral
MA-07-2.1.01: Measuring Physical Attributes - Students will determine: measures of both regular and irregular polygons, including length to the nearest eighth of an inch or nearest centimeter; the area and perimeter of triangles and quadrilaterals (rectangles, squares, trapezoids) (Using the Pythagorean theorem will not be required as a strategy.); and the area and circumference of circles. DOK-2

2. The measurements of Kevin's garden are shown below.



a. What is the area of Kevin's garden?

Next summer, Kevin wants a garden that has twice as much area as the one he has now.

a. Describe how Kevin can enlarge his garden so the area will double. Show or explain how you know you are right.
b. Jill thinks that Kevin can double the area of his garden by doubling both the length and the width. Use words, pictures, or numbers to show that Jill is either correct or incorrect.

BE SURE TO LABEL YOUR RESPONSES a, b, AND c.

Asset #57186.000 **6380 - KY - Green River, Mathematics, Grade 7, SEQ #: 2 EQ: N**

Scoring Guide

Score	Description
4	The student response demonstrates an exemplary understanding of the Measurement concepts involved in determining the area of a rectangle to solve real-world problems.
3	The student response demonstrates a good understanding of the Measurement concepts involved in determining the area of a rectangle to solve real-world problems. Although there is significant evidence that the student was able to recognize and apply the concepts involved, some aspect of the response is flawed. As a result the response merits 3 points.
2	The student response demonstrates a fair understanding of the Measurement concepts involved in determining the area of a rectangle to solve real-world problems. While some aspects of the task are completed correctly, others are not. The mixed evidence provided by the student merits 2 points.
1	The student response demonstrates a minimal understanding of the Measurement concepts involved in determining the area of a rectangle to solve real-world problems.
0	Response is incorrect or contains some correct work that is irrelevant to the skill or concept being measured.
Blank	No response.

Training Notes

Additional Notes

In Part c, an answer of "Jill is incorrect" without work or explanation does not demonstrate understanding of the Measurement concepts.

Sample Response:

Part a: 24 square feet

Part b: He could double the width to 8 feet. The area would be $6 \times 8 = 48$.

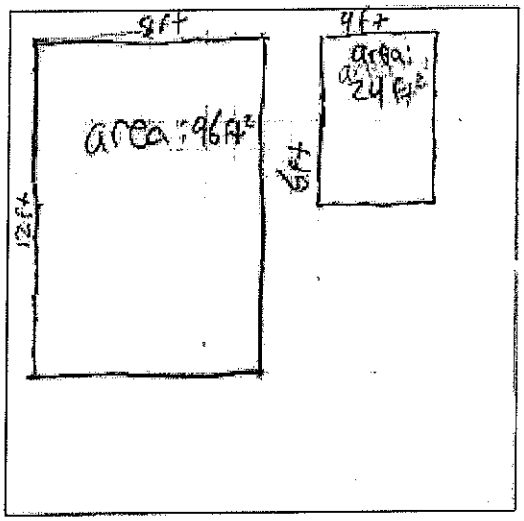
Part c: Jill is wrong. If both the length and width are doubled, the area would be $12 \times 8 = 96$ sq. ft.

16. (a) 4ft x 6ft = 24 ft^2

(b) he wants the area to be 48 Ft^2 so you just take factors of 48

12 and 4
6 and 8
3 and 16
2 and 24
1 and 48

(c) Jill is not correct because if you look at the gardens → the area is 4 times larger



Contract: 6351 Math	**Grade:** 06	**Content:** Math
Booklet: 1402330801	**Response Code:** MA03116	A
comments go here.4		

a - 1
b - 2
c -

16.

a. 6×4=24 Area = 24 feet

b. Double the length or width
This will create: 12×4=48 or 6×8=48
48 feet is double the area

c. She is incorrect because double both the width and height will quadruple the area

ex: 12×8=96

ex.

omit →

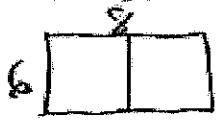
Contract: 6351 Math	**Grade:** 06	**Content:** Math
Booklet: 1402330111	**Response Code:** MA03116	
comments go here.3		

a - 1/2
b. 2
c - 1
3 1/2 pts
3

16. A 4

6 ☐ = A = 24

B Put another rectangle by its side with its same length and width



C. You can't double the length and width because it would be to big and he would have too much extra land.

Contract: 6351 Math **Grade:** 06 **Content:** Math

Booklet: 1402330105 **Response Code:** MA03116

comments go here.3

A

a - $\frac{1}{2}$

b - 2

c - 0

$\frac{1}{2}$ 2 1/2

2

16.

a) area = 24ft

-next summer = 48ft

b) add 2 ft to length and width

6 + 2 = 8 8 × 6 = 48ft

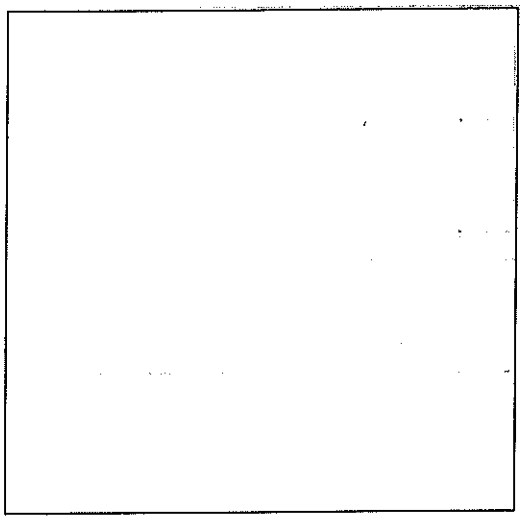
4 + 2 = 6

c) incorrect

4.4 = 16

6.6 = 36

16.36 = 576



Contract: 6351 Math	**Grade:** 06	**Content:** Math
Booklet: 1402330817	**Response Code:** MA03116	A
comments go here.2		

a - $\frac{1}{2}$

b. 2

c. 0

2 ft

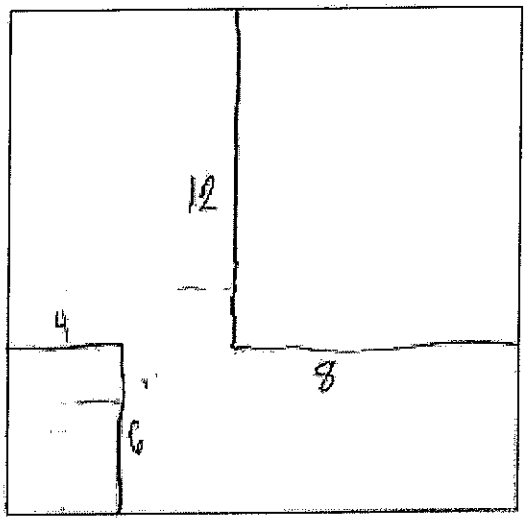
9

18.

a. 24 feet

B. All he has to do is add 6 to the 6 and 4 to the 4,

C. She's correct



Contract: 6351 Math **Grade:** 06 **Content:** Math

Booklet: 1402330010 **Response Code:** MA03116

comments go here.1

A

a - 1/2

b - 0

c - 0

1/2 pt

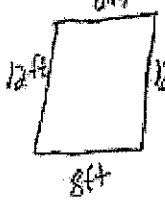
Answer Space

16.

$\frac{4}{\times 2}{8}$ $\frac{6}{\times 2}{12}$ $\frac{12}{+8}{20}$

a= 20 ft.

b= you can double the width and length

c= 

Jill is correct

Contract: 6351 Math	**Grade:** 06	**Content:** Math
Booklet: 1402330012	**Response Code:** MA03116	A
comments go here.0		

a - 0

b - 0

c - 0

- 0

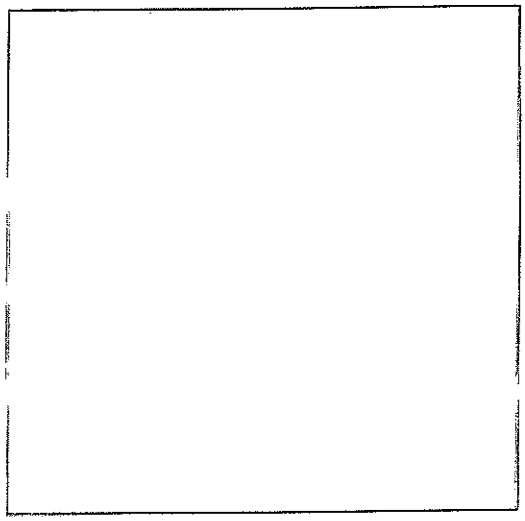
16.

a.- 52, 104

b:- multiply 2 by 6 you get 12 multiply 2 by 4 you get 12 and so you have 12 by 12

c.- correct

12 | 12 | = 104 yds.



Contract: 6351 Math **Grade:** 06 **Content:** Math

Booklet: 1402330021 **Response Code:** MA03116

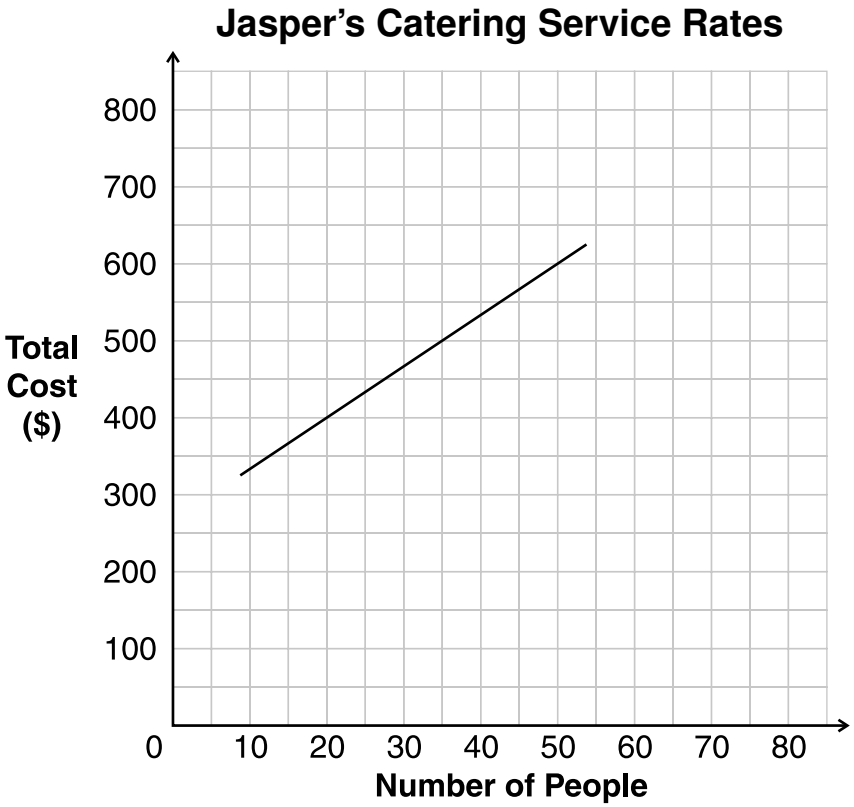
comments go here.0

T

a - 0
b - 0
c - 0
0

Asset Type: Constructed Response / Calculator: Calculator Neutral
MA-07-3.3.01: Coordinate Geometry - Students will identify and graph ordered pairs on a coordinate system, correctly identifying the origin, axes, and ordered pairs; and will apply graphing in the coordinate system to solve real-world problems. DOK-2

3. Jasper's Catering Service has been hired to prepare a dinner for an awards dinner for a school. The graph below shows the total cost to serve different numbers of people.



a. Based on the graph, what is the total cost to serve 50 people?

The principal has $500 to spend on the dinner.

b. There are 24 students who will go to the dinner. What is the greatest number of guests that can attend the dinner for a total cost of $500? Show or explain how you found your answer.

c. Each of the 24 students wants to have 2 guests at the dinner. How much **more** money than $500 will be needed in order to pay for the dinner? Show or explain how you found your answer.

Asset #57204.000 **6380 - KY - Green River, Mathematics, Grade 7, SEQ #: 3 EQ: N**

Scoring Guide

Score	Description
4	The student response demonstrates an exemplary understanding of the Geometry concepts involved in applying graphing in the coordinate system to solve real-world problems.
3	The student response demonstrates a good understanding of the Geometry concepts involved in applying graphing in the coordinate system to solve real-world problems. Although there is significant evidence that the student was able to recognize and apply the concepts involved, some aspect of the response is flawed. As a result the response merits 3 points.
2	The student response demonstrates a fair understanding of the Geometry concepts involved in applying graphing in the coordinate system to solve real-world problems. While some aspects of the task are completed correctly, others are not. The mixed evidence provided by the student merits 2 points.
1	The student response demonstrates a minimal understanding of the Geometry concepts involved in applying graphing in the coordinate system to solve real-world problems.
0	Response is incorrect or contains some correct work that is irrelevant to the skill or concept being measured.
Blank	No response.

Training Notes

Additional Notes

- Part b: Be aware that student response might include the 24 students in the "number of guests that can attend the dinner".
- Note that there is a range of correct values for Part c, e.g., $238 - $260.

Sample Response:

Part a: $600

Part b: I looked across the line through $500 to the graph and then went down to 35 so $500 will pay for 35 people. $35 - 24 = 11$, so they can have 11 guests.

Part c: $24 \times 3 = 72$ people in all. I extended the line on the graph so it went beyond 72. Using the graph it looks like it will cost about $750, so they'll need another $250.

16. a. Cost - $600

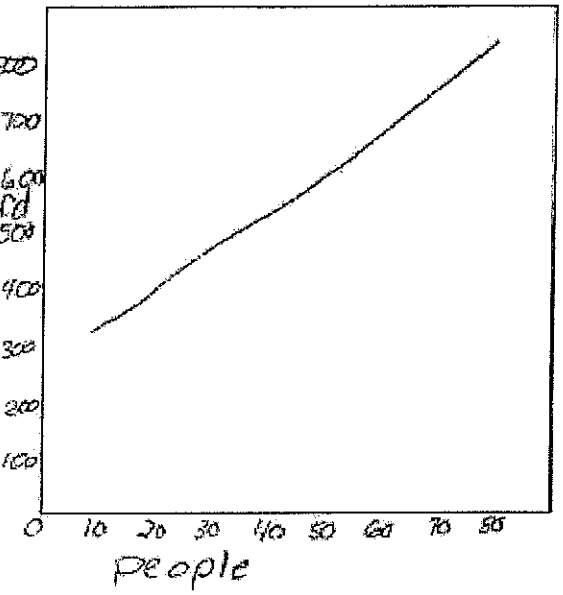
b. $500 = 35 people 50 35 people - 24 students = 11 guests

c about $260 more dollars

I drew the graph and multiplied 24 x 3 = 72 because each student wanted two guests. I then continued where the line would be and got about 760 people

760
500
260

760 so, I subtracted that by 500 to get about 260 more dollars



Contract: 6351 Math	**Grade:** 07	**Content:** Math
Booklet: 1403333963	**Response Code:** MA04116	

4

1

16. a. $600

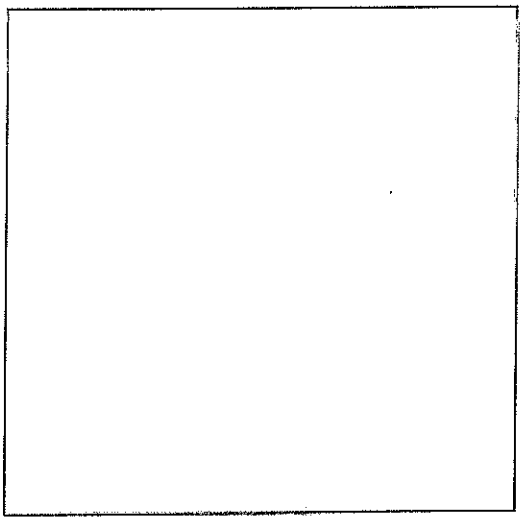
b. 11 guests

35
24
11

c. $250 more

24
× 2
48
+24
72

750
- 500
250



Contract: 6351 Math **Grade:** 07 **Content:** Math

Booklet: 1403335269 **Response Code:** MA04116

4

A

16. a. 600 $

b. 11 guests because 35 people ran come for 500 $ 35 - 24 students = (11)

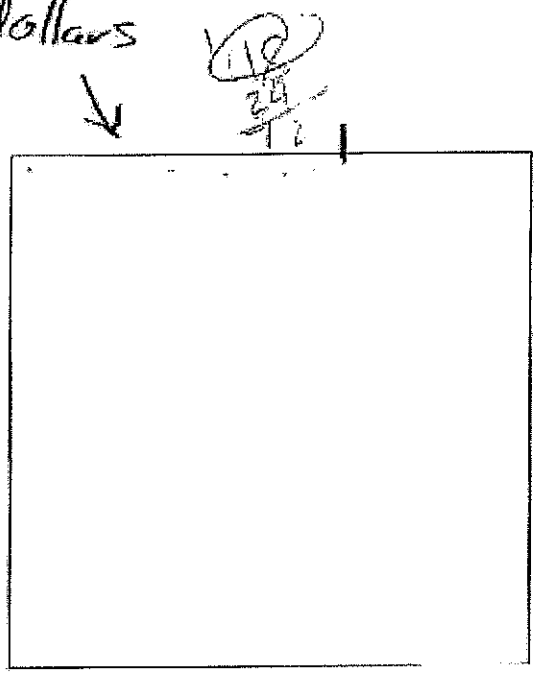
c. around 750 dollars

because 48 guests

48 + 24 students =

72 is okay

750 $ on the chart.



Contract: 6351 Math	**Grade:** 05	**Content:** Math
Booklet: 1402330391	**Response Code:** MA01316	

16.

a. $600

b. 11

c. $250. First you find out the total amount of guests, then after you find that out you extend the graph to fit the number of people = 75, then since the graphends at $750, you subtract $500 from $750 to get $250

Contract: 6351 Math	**Grade:** 07	**Content:** Math
Booklet: 1403333622	**Response Code:** MA04116	

3

1

1

2

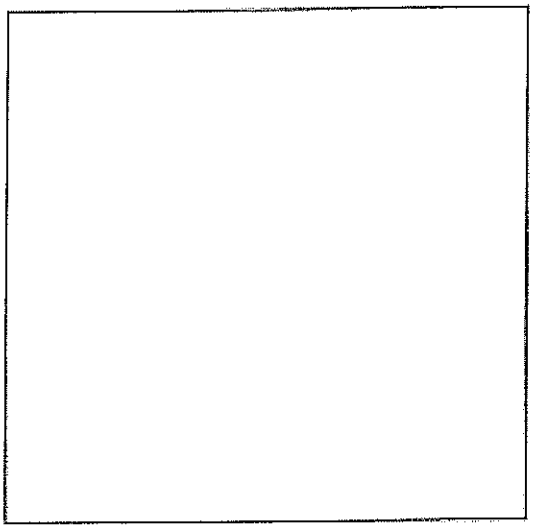
1

16. a. $500

b. 35 people because if you look at 500 and find the line and you go all the way down you will see 35.

c. $90 more dollars because 24 plus 24 is 48 and it cost 590 to pay for 48 people and 590 minus 500 is 90.

590
500
90



Contract: 6351 Math **Grade:** 05 **Content:** Math

Booklet: 1402330202 **Response Code:** MA01316

2

1
+2
0

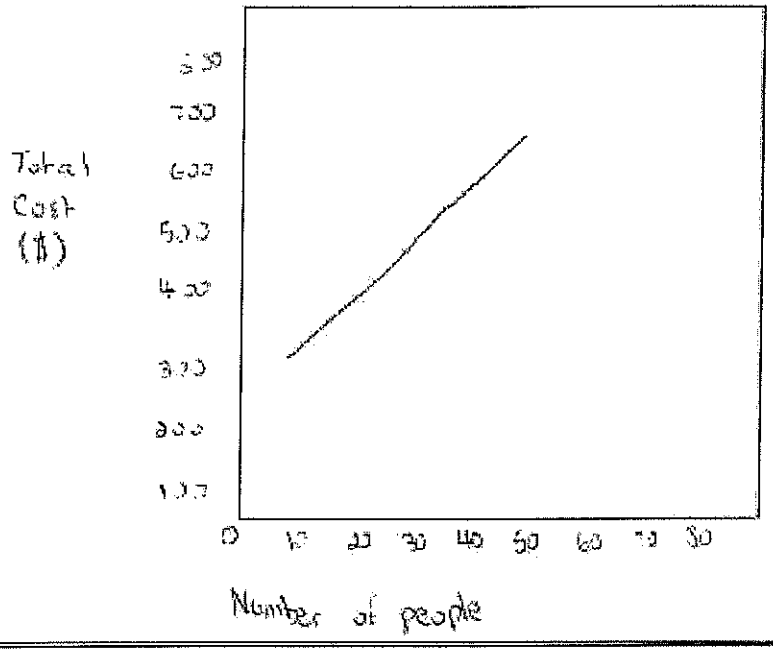
1

16.

a: The total cost to serve 50 people is $625

b: There can only be 35 people who go to the dinner if the budget is $500
I found my answer by using the cost.

c: You will need $610 for 46 people to attend the dinner, by using the line on the chart I found my answer.



Contract: 6351 Math	**Grade:** 05	**Content:** Math
Booklet: 1402330169	**Response Code:** MA01316	

16. 26 more guest could attend the dinner I subtracted 50 - 24 and I got 26.

They charge $10 for each person. $220 more the will have 2 pay 220 more I times 24 x 2 I go 48 the x by 10 I go 480 the subtracted by 500 I got 200 then subtracted by 480 and go $220

500
24 peps
50 10
- 24
26

24
x 2
48

480
- 240
220

Contract: 6351 Math	**Grade:** 07	**Content:** Math
Booklet: 1403333123	**Response Code:** MA04116	

ϕ

A

Asset Type: Constructed Response / Calculator: N/A
MA-07-4.4.01: Probability - Students will apply counting techniques to determine the size of a sample space. DOK-2

4. The choices for sandwiches at Smiley's Deli are shown below.

Bread	Meat	Cheese
white (w)	turkey (t)	American (A)
oatmeal (o)	ham (h)	Swiss (S)
pita (p)	roast beef (r)	
	bologna (b)	

a. Make an organized list or diagram to show all the possible combinations of one meat and one cheese.
b. How many different kinds of sandwiches can be made using one bread, one meat, and one cheese?

Smiley's Deli offers

c. How many different ways can a person choose three different meats from the five choices? Show or explain how you found your answer.

Scoring Guide

Score	Description
4	The student response demonstrates an exemplary understanding of the Data Analysis and Probability concepts involved in applying counting techniques to determine the size of a sample space for a real-world situation.
3	The student response demonstrates a good understanding of the Data Analysis and Probability concepts involved in applying counting techniques to determine the size of a sample space for a real-world situation. Although there is significant evidence that the student was able to recognize and apply the concepts involved, some aspect of the response is flawed. As a result the response merits 3 points.
2	The student response demonstrates a fair understanding of the Data Analysis and Probability concepts involved in applying counting techniques to determine the size of a sample space for a real-world situation. While some aspects of the task are completed correctly, others are not. The mixed evidence provided by the student merits 2 points.
1	The student response demonstrates a minimal understanding of the Data Analysis and Probability concepts involved in applying counting techniques to determine the size of a sample space for a real-world situation.
0	Response is incorrect or contains some correct work that is irrelevant to the skill or concept being measured.
Blank	No response.

Training Notes

Sample Response:

Part a: tA, tS, hA, hS, rA, rS, cA, cS, bA, bS

Part b: $3 \times 5 \times 2 = 30$

Part c: There are 10 ways: thr, thc, thb, trc, trb, tcb, hrc, hrb, hbc, rcb

16.

[b.] There's 3 breads 5 meats and 2 cheeses.

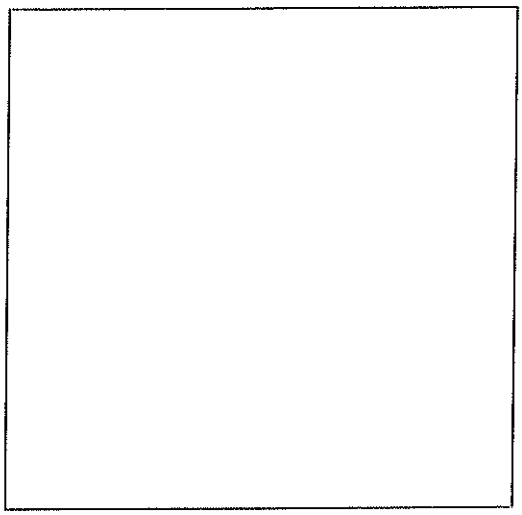
$3 \times 5 \times 2 = 30$ different types of sandwiches

[a]
tA
tS
nA
nS
rA
rS
cA
cS
bA
bS

[c.]
thr nre rcb
thc nrb
tnb ncb
erc
erb
tcb

} 10 choices

There is 10 choices of meat a person can choose.



Contract: 6351 Math	**Grade:** 07	**Content:** Math
Booklet: 1403331565	**Response Code:** MA06116	

4

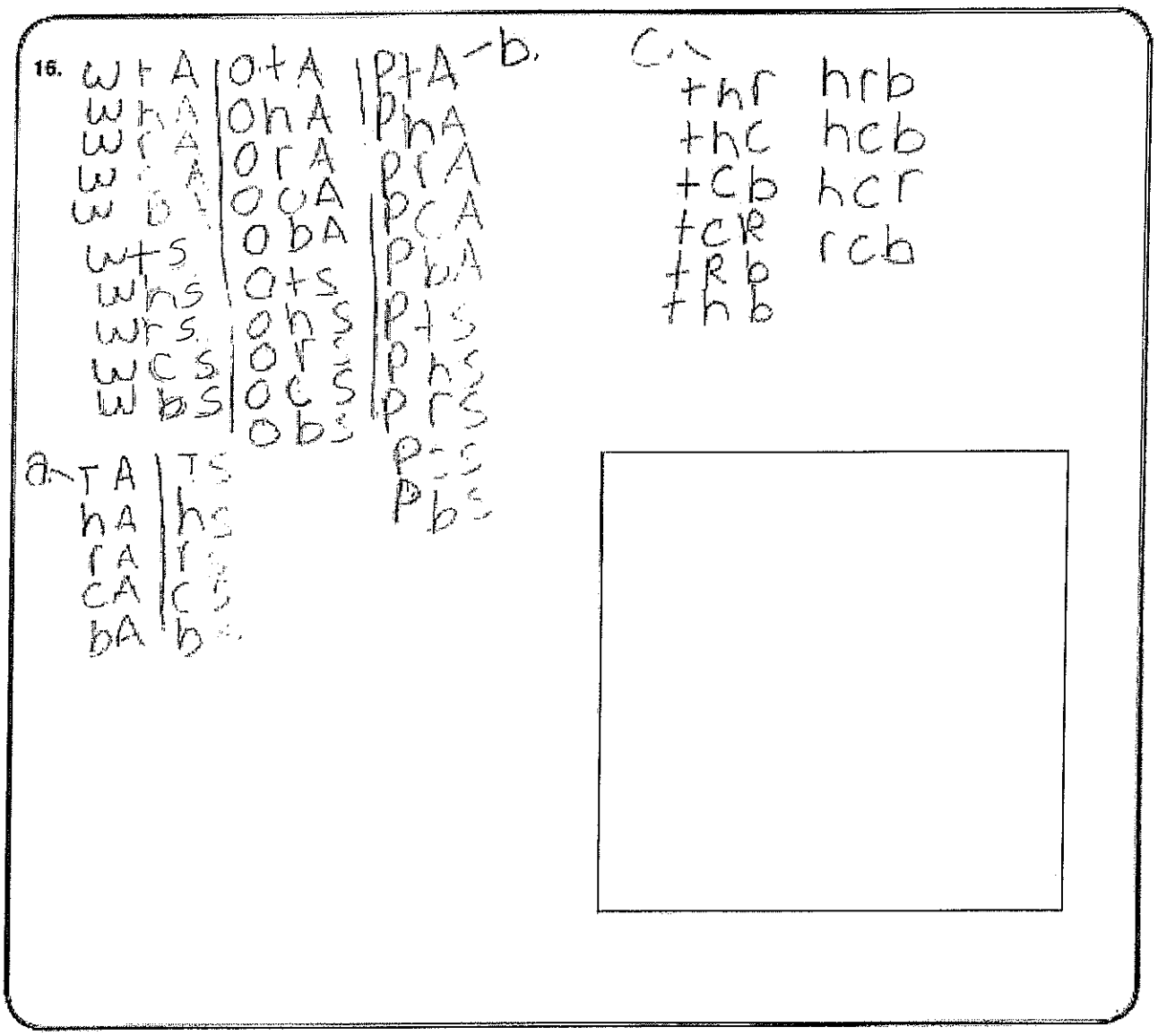
a. 2

b. 2

c. 2

A

16.



Contract: 6351 Math	**Grade:** 05	**Content:** Math
Booklet: 1402332420	**Response Code:** MA03316	

2

a. 2

b. 1 list w/o total

c 1 list w/o total

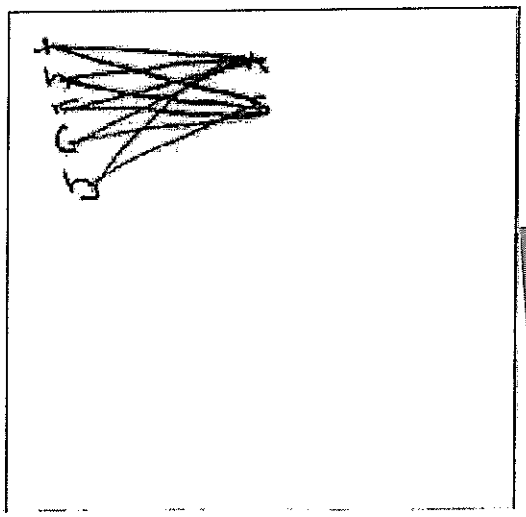
A

16. a. American
Turkey
ham
roast beef
corned beef
bologna

Swiss
Turkey
ham
roast beef
corned beef
bologna

b 30 different sandwiches
2 per bread per meat

c. 10 different choices
2 per a meat



Contract: 6351 Math	**Grade:** 07	**Content:** Math
Booklet: 1403331128	**Response Code:** MA06116	

(3)

a. 2 diagram in grid

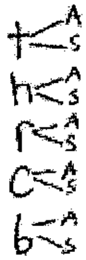
Also list would suffice

b. 1 ans.

c. 1 ans

16.

(a)



(b)

= 11

+ 11

+ 11

= 33 different ways

(c) thr
thc
thb = 6 ways
trc
trb
tcb

Contract: 6351 Math	**Grade:** 05	**Content:** Math
Booklet: 1402332429	**Response Code:** MA03316	

(2)

a. 2

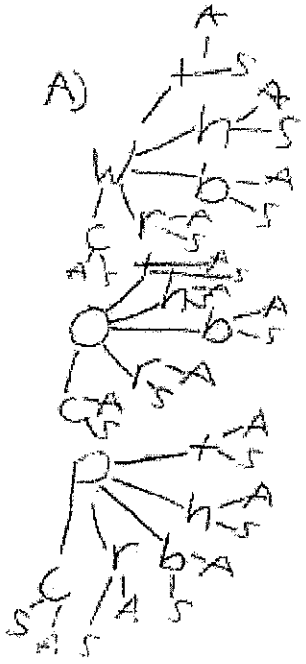
b. 1 wrong total - some correct combos

c. 1 partial list

T

16.

A)



B) 30 different kinds of sandwiches can be made.

C) 5 × 3 = 15 15 different ways

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(1)

a. 0

b. 2 list in a

c. 0

2
2
0
—
4

(2)

A

16.

Meats	cheese
Turkey with	A
or Turkey with	S

30 kinds of sandwiches

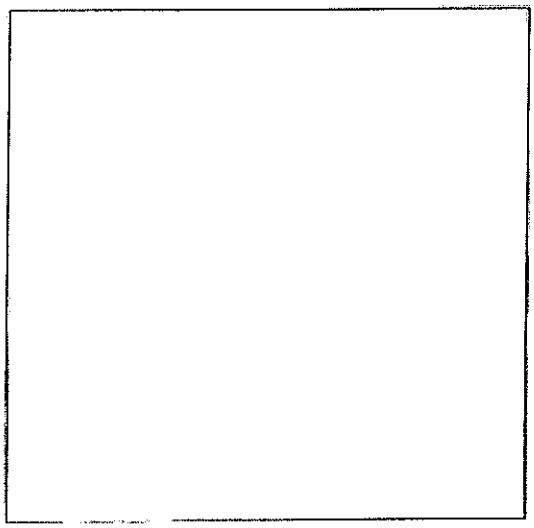
13 different ways to choose

ham with A
or ham with S

r with A
or r with S

c with A
or C with S

b with A
or b with S



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Booklet: 1402332369	**Response Code:** MA03316	

(2)

a. 2

b. 1

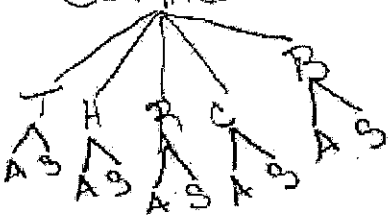
c. 0

16. (A.) White

(B.) 45 - I got my answer from adding up the different types in the trees.

(C.) 15. I added up all the meat in the tree.

Oatmeal



Pita

Contract: 6351 Math	**Grade:** 07	**Content:** Math
Booklet: 1403330382	**Response Code:** MA06116	

1

a. 0 ans. is there but doesn't indicate 10

2 pts for a

b. 0

c. C

minimal for combos in part c

A

16.

A)

American
bologna
Corned beef
ham
oatmeal
Pita
Swiss
turkey
White

b) 12 kinds

c) 12 kinds

$1\frac{3}{12} + 2 + \frac{4}{12} + \frac{3}{12} + \frac{2}{12} = 3\frac{12}{12}$

Contract: 6351 Math	**Grade:** 05	**Content:** Math
Booklet: 1402332355	**Response Code:** MA03316	

a. O

b. O

c. O